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09/832,237

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Sung-Ho Choi

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7590

10/07/2004

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EXAMINER

MOORE, IAN N

ART UNIT

PAPER NUMBER

2661

DATE MAILED: 10/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/832,237

Applicant(s)

CHOI ET AL.

Examiner

Ian N Moore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/02, 2/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Oath/Declaration*

1. The oath or declaration is missing. A properly signed oath or declaration in compliance with 37 CFR 1. 63, identifying the application by the above Application Number and Filing Date, is required. It is noted that NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION FILED UNDER 37 CFR 1.53(b) was sent on **5/29/2001** regarding the missing oath or declaration and fee/surcharge as set forth in 37 CFR 1.16(e), and no response from the applicant is received.

### *Drawings*

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the methods/steps of “**counting the number of access preambles**” and “**determining the persistence values**” (claims 1,5,9 and 13) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description

of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Dupont (U.S. 5,729,542).

**Regarding Claim 1**, Dupont'542 discloses a method for determining by a UTRAN a persistence value (see FIG. 4, P-Persistence parameter) for adjusting a number of access preambles (see FIG. 5, number of access requests) from a plurality of UEs (see FIG. 1, mobile station 105) requiring assignment of a common packet channel (CPCH), the method comprising the steps of:

counting the number of the access preambles detected in an access preamble period having a predetermined period (see FIG. 5, access request period which is predetermined access burst period 505; see col. 4, lines 54-56; see col. 6, lines 60 to col. 6, lines 12; note

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that the number of access messages/preambles within a predefined access burst period are counted by the base station); and

determining the persistence value based on the number of counted access preambles (see FIG. 4, P-Persistence parameters; see col. 4, lines 48-54, 56 to col. 6, lines 12; note that the base station determines the persistence parameters according the counted access messages/preambles requests).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dupont'542 in view of 3GPP'321 (ETSI TS 125 321).

**Regarding claim 2**, Dupont'542 discloses the determining persistence value as described above in claim 1.

Dupont'542 does not explicitly disclose transport format (TF).

However, the above-mentioned claimed limitations are taught by 3GPP'321. In particular, 3GPP'321 teaches persistence value is a unit of transport format (TF) (see section 11.3, paragraph 2; CMAC-config-REQ consists persistence values, which are transmission probability for each Transport format (TF)).

In view of this, having the system of Dupont'542 and then given the teaching of 3GPP'321, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Dupont'542, by providing the persistence values as a probability for each transport format (TF), as taught by 3GPP'321. The motivation to combine is to obtain the advantages/benefits taught by 3GPP'321 since 3GPP'321 states at section 11.3, paragraphs 1-3 that such modification would provide a controlling mechanism for each initial preamble ramping cycle as well as successive preamble ramping cycles and provide a mechanism for each TTI transmission while UE continues to transmit on the CPCH channel obtained using the initial access procedure. Also, as suggested by 3GPP'321, TF value is used as persistence value in order to determine the probability of each transport format in each access preamble during CPCH transmission control.

**Regarding claim 3**, Dupont'542 discloses the determining persistence value as described above in claim 1.

Dupont'542 does not explicitly disclose physical common packet channel.

However, the above-mentioned claimed limitations are taught by 3GPP'321. In particular, 3GPP'321 teaches persistence value is a unit of physical common packet channel (see section 11.3, paragraph 2, 3, and step 8; CMAC-config-REQ consists persistence values which are transmission probability for each Transport format (TF), and each TF is selected based upon CPCH physical channel. Thus, physical CPCH channel is utilized as persistence value).

In view of this, having the system of Dupont'542 and then given the teaching of 3GPP'321, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Dupont'542, by providing the persistence values as a probability for each transport format (TF) in each physical CPCH channel, as taught by 3GPP'321. The motivation to combine is to obtain the advantages/benefits taught by 3GPP'321 since 3GPP'321 states at section 11.3, paragraphs 1-3 that such modification would provide a controlling mechanism for each initial preamble ramping cycle as well as successive preamble ramping cycles and provide a mechanism for each TTI transmission while UE continues to transmit on the CPCH channel obtained using the initial access procedure.

**Regarding claim 4**, Dupont'542 discloses the determining persistence value as described above in claim 1.

Dupont'542 does not explicitly disclose CPCH set.

However, the above-mentioned claimed limitations are taught by 3GPP'321. In particular, 3GPP'321 teaches persistence value is a unit of CPCH set (see section 11.3, paragraph 2, 3, and step 8; CMAC-config-REQ consists persistence values which are transmission probability for each Transport format (TF) which is a CPCH set. Thus, physical CPCH set is utilized as persistence value).

In view of this, having the system of Dupont'542 and then given the teaching of 3GPP'321, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Dupont'542, by providing the persistence values

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as a probability for each transport format (TF) which is a CPCH set, as taught by 3GPP'321.

The motivation to combine is to obtain the advantages/benefits taught by 3GPP'321 since 3GPP'321 states at section 11.3, paragraphs 1-3 that such modification would provide a controlling mechanism for each initial preamble ramping cycle as well as successive preamble ramping cycles and provide a mechanism for each TTI transmission while UE continues to transmit on the CPCH channel obtained using the initial access procedure.

5. Claim 5, 9 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dupont'542 in view of 3GPP (ETSI TS 125 211).

**Regarding Claim 5**, Dupont'542 discloses a method for determining by a UTRAN a persistence value (see FIG. 4, P-Persistence parameter) for adjusting a number of access preambles (see FIG. 5, number of access requests) from a plurality of UEs (see FIG. 1, mobile station 105) requiring assignment of a common packet channel (CPCH), the method comprising the steps of:

counting the number of the access preambles detected in an access preamble period having a predetermined period (see FIG. 5, access request period which is predetermined access burst period 505; see col. 4, lines 54-56; see col. 6, lines 60 to col. 6, lines 12; note that the number of access messages/preambles within a predefined access burst period are counted by the base station); and

determining the persistence value based on the number of counted access preambles (see FIG. 4, P-Persistence parameters; see col. 4, lines 48-54, 56 to col. 6, lines 12; note that



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the base station determines the persistence parameters according the counted access messages/preambles requests).

Dupont'542 does not explicitly disclose CD (Collision Detection) preambles.

However, the above-mentioned claimed limitations are taught by 3GPP'211. In particular, 3GPP'211 teaches CD (Collision Detection) preambles (see FIG. 6; section 5.2.2.2.1 and 5.2.2.2.3; collision detection preamble (CD-P)).

In view of this, having the system of Dupont'542 and then given the teaching of 3GPP'211, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of 3GPP'211, by providing CD-P preambles as one of access preambles in CPCH transmission, as taught by 3GPP'211. The motivation to combine is to obtain the advantages/benefits taught by 3GPP'211 since 3GPP'211 states at section 5.2.2.2.1, that such modification would provide fast acquisition indication based on DSMA-CD approach so that UE can start transmission at a number of well-defined time-offsets, relative to the frame boundary of the received BCH of the current cell. Moreover, by utilizing DSMA-CD approach in CPCH transmission, the system can detect the collision, thereby decreasing the potential collision.

**Regarding Claim 9**, Dupont'542 discloses a method for determining by a UTRAN a persistence value (see FIG. 4, P-Persistence parameter) for adjusting a number of access preambles (see FIG. 5, number of access requests) from a plurality of UEs (see FIG. 1, mobile station 105) requiring assignment of a common packet channel (CPCH), the method comprising the steps of:

counting the number of the access preambles detected in an access preamble period having a predetermined period (see FIG. 5, access request period which is predetermined access burst period 505; see col. 4, lines 54-56; see col. 6, lines 60 to col. 6, lines 12; note that the number of access messages/preambles within a predefined access burst period are counted by the base station); and

determining the persistence value based on the number of counted access preambles (see FIG. 4, P-Persistence parameters; see col. 4, lines 48-54, 56 to col. 6, lines 12; note that the base station determines the persistence parameters according the counted access messages/preambles requests).

Dupont'542 does not explicitly disclose CPCH assigned by the UTRAN.

However, the above-mentioned claimed limitations are taught by 3GPP'211. In particular, 3GPP'211 teaches CPCH assigned by the UTRAN (see FIG. 6; section 5.2.2.2.1 and 5.2.2.2.2; CPCH access preamble part).

In view of this, having the system of Dupont'542 and then given the teaching of 3GPP'211, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of 3GPP'211, by providing CPCH access preambles as one of access preambles in CPCH transmission, as taught by 3GPP'211. The motivation to combine is to obtain the advantages/benefits taught by 3GPP'211 since 3GPP'211 states at section 5.2.2.2.1, that such modification would provide fast acquisition indication based on DSMA-CD approach so that UE can start transmission at a number of well-defined time-offsets, relative to the frame boundary of the received BCH of the current cell.

**Regarding Claim 13**, Dupont'542 discloses a method for adjusting access attempts depending on a number of access attempts (see FIG. 5, number of access requests) from a plurality of UEs (see FIG. 1, mobile station 105), comprising the steps of:

requesting measurement of the access attempts (see FIG. 2, Access Manager 232 of the serving GSN sends a message/request, for determining/measuring access configuration parameters with regards to priority, to access controller 222 of base station subsystem 220; see col. 3, lines 35-42; 60-67);

upon receipt of a measurement request, counting the number of the access attempts from the UEs per unit time and reporting the counted value (see FIG. 5, measurement unit time from the UE is the predetermined access burst period 505; see col. 4, lines 54-56; see col. 6, lines 60 to col. 6, lines 12; note that upon receiving a message/request from the access manager 232, access controller 222 of the BSS counts the number of access messages/preambles within a predefined access burst period in accordance with the priority; );

determining, in a CRNC (Control Radio Network Controller) (see FIG. 2, BSC in the base station subsystem 220), a persistence value (see FIG. 4, P-Persistence parameters) depending on the number of the access attempts reported (see col. 4, lines 48-54, 56 to col. 6, lines 44; note that the base station controller or BSS determines the persistence parameters according the counted access messages/preambles requests in accordance with the priority); and

providing the determined persistence value to a UTRAN (see FIG. 2, Access Manager 232 of the serving GSN with connects to PDN 140, see FIG. 1; Access control of the BSS/BSC 222 sends the access channel statistics which includes persistence value to a GSN with couples to the network; see col. 3, lines 30-47).

Dupont'542 does not explicitly disclose CPCH.

However, the above-mentioned claimed limitations are taught by 3GPP'211. In particular, 3GPP'211 teaches CPCH access attempts/requests (see FIG. 6; section 5.2.2.2.1 and 5.2.2.2.2; CPCH access preamble part).

In view of this, having the system of Dupont'542 and then given the teaching of 3GPP'211, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of 3GPP'211, by providing CPCH access preambles as one of access preambles in CPCH transmission, as taught by 3GPP'211. The motivation to combine is to obtain the advantages/benefits taught by 3GPP'211 since 3GPP'211 states at section 5.2.2.2.1, that such modification would provide fast acquisition indication based on DSMA-CD approach so that UE can start transmission at a number of well-defined time-offsets, relative to the frame boundary of the received BCH of the current cell.

**Regarding Claim 14**, Dupont'542 discloses wherein the number of access attempts is equivalent to a number of access preambles from the UEs (see col. 3, lines 60-67; see col. 4, lines 50-60). 3GPP'211 discloses the number of CPCH access attempts, see FIG. 6.

In view of this, having the system of Dupont'542 and then given the teaching of 3GPP'211, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of 3GPP'211 as taught by 3GPP'211 for the same purpose and motivation as described above in claim 13.

**Regarding Claim 15**, Dupont'542 discloses wherein the number of access attempts is equivalent to a number of access preambles from the UEs (see col. 3, lines 60-67; see col. 4, lines 50-60). 3GPP'211 discloses the number of CD preambles, see FIG. 6.

In view of this, having the system of Dupont'542 and then given the teaching of 3GPP'211, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of 3GPP'211 as taught by 3GPP'211 for the same purpose and motivation as described above in claim 13.

6. Claims 6-8, 10-12, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dupont'542 and 3GPP'211, as described above in claim 5, 9 and 13, and further in view of 3GPP'321 (ETSI TS 125 321).

**Regarding claims 6,10,16**, Dupont'542 discloses the determining persistence value as described above in claims 5, 9 or 13.

Dupont'542 does not explicitly disclose transport format (TF).

However, the above-mentioned claimed limitations are taught by 3GPP'321. In particular, 3GPP'321 teaches persistence value is a unit of transport format (TF) (see section

11.3, paragraph 2; CMAC-config-REQ consists persistence values, which are transmission probability for each Transport format (TF)).

In view of this, having the combined system of Dupont'542 and 3GPP'211, then given the teaching of 3GPP'321, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Dupont'542 and 3GPP'211, by providing the persistence values as a probability for each transport format (TF), as taught by 3GPP'321. The motivation to combine is to obtain the advantages/benefits taught by 3GPP'321 since 3GPP'321 states at section 11.3, paragraphs 1-3 that such modification would provide a controlling mechanism for each initial preamble ramping cycle as well as successive preamble ramping cycles and provide a mechanism for each TTI transmission while UE continues to transmit on the CPCH channel obtained using the initial access procedure. Also, as suggested by 3GPP'321, TF value is used as persistence value in order to determine the probability of each transport format in each access preamble during CPCH transmission control.

**Regarding claims 7,11,17,** Dupont'542 discloses the determining persistence value as described above in claim 5,9 or 13.

Dupont'542 does not explicitly disclose physical common packet channel.

However, the above-mentioned claimed limitations are taught by 3GPP'321. In particular, 3GPP'321 teaches persistence value is a unit of physical common packet channel (see section 11.3, paragraph 2, 3, and step 8; CMAC-config-REQ consists persistence values which are transmission probability for each Transport format (TF), and each TF is selected

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based upon CPCH physical channel. Thus, physical CPCH channel is utilized as persistence value).

In view of this, having the combined system of Dupont'542 and 3GPP'211, then given the teaching of 3GPP'321, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Dupont'542 and 3GPP'211, by providing the persistence values as a probability for each transport format (TF) in each physical CPCH channel, as taught by 3GPP'321. The motivation to combine is to obtain the advantages/benefits taught by 3GPP'321 since 3GPP'321 states at section 11.3, paragraphs 1-3 that such modification would provide a controlling mechanism for each initial preamble ramping cycle as well as successive preamble ramping cycles and provide a mechanism for each TTI transmission while UE continues to transmit on the CPCH channel obtained using the initial access procedure.

**Regarding claim 8,12, and 18**, Dupont'542 discloses the determining persistence value as described above in claim 5,9, or 13.

Dupont'542 does not explicitly disclose CPCH set.

However, the above-mentioned claimed limitations are taught by 3GPP'321. In particular, 3GPP'321 teaches persistence value is a unit of CPCH set (see section 11.3, paragraph 2, 3, and step 8; CMAC-config-REQ consists persistence values which are transmission probability for each Transport format (TF) which is a CPCH set. Thus, physical CPCH set is utilized as persistence value).

In view of this, having the combined system of Dupont'542 and 3GPP'211, then given the teaching of 3GPP'321, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Dupont'542 and 3GPP'211, by providing the persistence values as a probability for each transport format (TF) which is a CPCH set, as taught by 3GPP'321. The motivation to combine is to obtain the advantages/benefits taught by 3GPP'321 since 3GPP'321 states at section 11.3, paragraphs 1-3 that such modification would provide a controlling mechanism for each initial preamble ramping cycle as well as successive preamble ramping cycles and provide a mechanism for each TTI transmission while UE continues to transmit on the CPCH channel obtained using the initial access procedure.



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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian N Moore whose telephone number is 571-272-3085. The examiner can normally be reached on M-F: 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ken Vanderpuye can be reached on 571-272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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**BRIAN NGUYEN**  
**PRIMARY EXAMINER**